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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,032	12/07/2004	Sergio Capurro	BA-22902	2851
7590 09/19/2007 R Neil Sudol Coleman Sudol Sapone PC 714 Colorado Avenue Bridgeport, CT 06605-1601			EXAMINER YABUT, DIANE D	
			ART UNIT 3734	PAPER NUMBER
			MAIL DATE 09/19/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/517,032

Applicant(s)

CAPURRO, SERGIO

Examiner

Diane Yabut

Art Unit

3734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 August 2007 has been entered.

### *Claim Objections*

2. Claim 2 is objected to because of the following informalities: On line 2 it reads "bevelled" and it should instead read --beveled--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by **Villegas** (U.S. Patent No. **2,581,564**).

Art Unit: 3734

Claim 1: Villegas discloses an atraumatic surgical needle **10** having two tips (**12** and near **18**) and comprising a tubular metal shaft that is hollow from tip to tip, at least one of the tips being open (near **18**), the shaft having a central portion (between the two tips) that is equipped with a hole **16**, through which emerges a surgical thread **14** that is anchored inside the needle (Figures 1-2, col. 1, line 45 to col. 2, line 4)

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Villegas** (U.S. Patent No. **2,581,564**) in view of **Scirica et al.** (U.S. Patent No. **5,908,428**).

Claim 2: Villegas discloses the claimed device, including the hole **16** through which the thread **14** passes involves only one wall of the hollow shaft (see Figures 1-2), except for the both tips being beveled (Villega only teaches tip **12** being beveled) in one or more oblique planes.

Scirica et al. teaches a needle wherein its tips **204, 208** are beveled in one or more oblique planes (Figure 6). It would have been obvious to one of ordinary skill in the art at the time of invention to provide both tips being beveled in one or more oblique

Art Unit: 3734

planes, as taught by Scirica et al., to Villegas in order to effectively act as a shuttle needle that is able to penetrate tissue going in two opposite directions

Claim 3: Villegas discloses the claimed device except for the surgical thread being anchored by pinching the needle.

Scirica et al. teaches a needle wherein one end of the surgical thread **34** is inserted into the hole **212** of the needle and is anchored by pinching the needle (Figure 7 and col. 10, lines 21-26). It would have been obvious to one of ordinary skill in the art at the time of invention to anchor the surgical thread by pinching the needle, as taught by Scirica et al., to Villegas to effectively secure the thread simply by compression and eliminating the need for another securing mechanism.

3. Claims 4-6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Villegas** (U.S. Patent No. **2,581,564**) in view of **Flagg et al.** (U.S. Patent No. **2,240,330**).

Claims 4-6: Villegas discloses the claimed device, including a surgical thread being inserted into the hole of an atraumatic two-tipped needle being made to emerge from one end, except for the surgical thread being equipped with a knot and adapted to be drawn back inside the shaft towards the hole or be equipped with a knot in advance, being inserted into one end of the needle.

Flagg et al. teaches a surgical thread being equipped with a knot **13** emerging from one end and being adapted to be drawn back inside the shaft towards the hole or be equipped with a knot in advance or to be inserted into one end of the needle and

Art Unit: 3734

emerged through the hole, in order to secure a suture to a needle hole (Figure 12, col. 2, lines 52-54). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a knot for anchoring the surgical thread, as taught by Flagg et al., to Villegas, since it was known in the art that the use of knots to anchor threads to surgical needles and other fields of endeavor to limit the movement of a suture, thread, or cord through an opening using a knot is commonly used.

Claim 13: Villegas discloses the claimed device except for the surgical thread being fixed by means of two or more anchoring techniques.

Flagg et al. teaches a surgical thread being fixed by means of two or more anchoring techniques to ensure a firm grip on the suture (col. 5, lines 3-8). It would have been obvious to one of ordinary skill in the art to provide a thread being fixed by means of two or more anchoring techniques, as taught by Flagg et al., to Villegas, in order to ensure a firm anchoring grip on the suture.

4. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Villegas** (U.S. Patent No. **2,581,564**) in view of **Coplan** (U.S. Patent No. **3,918,455**).

Claims 7-11: Villegas discloses the claimed device, including an atraumatic surgical needle with one end of the surgical thread being inserted into the hole and being anchored inside the atraumatic two-tipped needle, except for being anchored by means of a scotch, a solid bar or a portion of tube, made of metal or plastic, the caliber of which is determined by the diameter of the needle, which is pushed down inside the needle from one of the two ends.

Art Unit: 3734

Coplan teaches a surgical thread, emerging from one end of the needle, being inserted and anchored, or fixed, in a hole in one end of a scotch **34**, a solid bar or a portion of tube, made of metal or plastic, the caliber of which is determined by the diameter of the needle, which is pushed down inside the needle from one of the two ends (Figure 4, col. 4, lines 55-63 and col. 6, lines 60-62). Coplan teaches that the use of the scotch **34** for a suture-needle combination reduces trauma at the site of tissue penetration and reduces hazard of suture tear-out (col. 1, lines 60-68). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Villegas by providing a scotch, which is pushed down inside the needle from one of two ends, as taught by Coplan, in order to reduce trauma at the site of tissue penetration and hazard of suture tear-out.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Villegas** (U.S. Patent No. **2,581,564**) in view of **Borst et al.** (U.S. Pub. No. **20040260145**).

Claim 12: Villegas discloses the claimed device, including a surgical thread being inserted into an atraumatic two-tipped needle, except the thread being fixed between the coils of a tiny spring.

Borst et al. teaches a suture being fixed between the coils of a tiny spring (page 11, paragraph 132). It would have been obvious to one of ordinary skill in the art to fix a suture between the coils of a tiny spring, as taught by Borst et al., to Villegas since it was known in the art that springs are used as flexible retaining means for sutures, threads, and cords.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane Yabut whose telephone number is (571) 272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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MICHAEL J. HAYES  
SUPERVISORY PATENT EXAMINER